Index of Claims

Application/Control No.

09/828,126

Examiner

Date

Afsar M. Qureshi

Applicant(s)/Patent under Reexamination

KIM, KI-CHUL

Art Unit

2616

| <b>√</b> | Rejected |
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| =        | Allowed  |

(Through numeral) Cancelled Restricted

Non-Elected N Interference

**Appeal** Α 0 Objected

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|-------------|----------|------------|--------------------|----------|------------|----------|----------|----------|--------------------------------------------------|--------------|-----|------------|-----------|--------------------------------------------------|----------|----------|
| Cla         | aim .    |            |                    |          | L          | Date     | _        |          | _                                                |              | . ! | Cla        | min       |                                                  |          | 1        |
| Final       | Original | 2/8/06     |                    |          |            |          |          |          |                                                  |              |     | Final      | Original  |                                                  |          |          |
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|             | 7        | •          |                    |          |            |          |          |          |                                                  |              |     |            | 57        |                                                  |          | _        |
|             | 8        | -          | L                  |          |            |          | <u></u>  | <u> </u> | <u></u>                                          |              |     |            | 58        |                                                  |          | L        |
|             | 9        | Ŀ          | L_                 |          |            | <u> </u> | _        |          | Ш                                                |              |     |            | 59        |                                                  |          | L        |
|             | 10       | 트          | _                  | L        | L_         |          |          | _        |                                                  |              | -   |            | 60        |                                                  |          | <u> </u> |
|             | 11       | =          | _                  |          |            | <u> </u> |          | _        |                                                  |              |     |            | 61        | Ш                                                |          | <u> </u> |
|             | 12       | <u> </u>   |                    |          | _          | _        | <u> </u> | _        |                                                  |              | :   |            | 62        |                                                  |          | -        |
|             | 13       | <u> </u>   |                    | _        | <u> </u>   | <u> </u> | <u> </u> |          |                                                  |              |     |            | 63        | Н                                                |          | ┝        |
|             | 14       | -          |                    |          | <u> </u>   | ┡        | <u> </u> |          |                                                  | _            | - 1 |            | 64<br>65  |                                                  |          | H        |
|             | 15       | -          | ⊢                  |          | _          | <u> </u> | _        | ļ        |                                                  | <u> </u>     |     |            | 65        | -                                                |          | ┝        |
|             | 16       | -          | ⊢                  |          |            | <u> </u> |          |          | -                                                |              |     |            | 66<br>67  | $\vdash$                                         |          | ├        |
|             | 17       | -          | <u> </u>           | _        | _          | 1        |          | -        |                                                  |              | i.  |            | 68        | -                                                |          | ┞        |
|             | 18       | -          | <u> </u>           | <u> </u> |            | -        | <u> </u> | ├—       |                                                  | <u> </u>     |     | -          | 69        | H                                                |          | ┝        |
|             | 19       | -          | ⊢                  | ├        | ├          | <b>-</b> | ┝        | -        | -                                                |              | -   | <u> </u>   | 70        | -                                                |          | ⊢        |
| -           | 20<br>21 | <u> </u> - | ⊢                  | ┢┈       | <u> </u>   | -        | <u> </u> | ├—       | H                                                | <u> </u>     | ٠., |            | 71        | Н                                                |          | ⊢        |
| $\vdash$    | 22       | -          | ┢                  | ├        | -          | ⊢        |          |          | -                                                | _            |     | <b>-</b>   | 72        | -                                                |          | ⊢        |
| <del></del> | 23       | -          | ├                  | ├─       | $\vdash$   | $\vdash$ | ┢        | $\vdash$ | H                                                |              |     | -          | 73        | Н                                                |          | ┝        |
| -           | 24       | -          | ⊢                  | -        | ⊢          | ⊢        |          | -        |                                                  |              |     |            | 74        |                                                  |          | ┢        |
| -           | 25       | -          | ┢                  | ┝        | ┝          | ╁        | $\vdash$ | -        | ╌                                                | $\vdash$     |     |            | 75        |                                                  |          | H        |
| <u> </u>    | 26       | -          | ╁                  | ╁        | $\vdash$   | $\vdash$ | ┢╌       | ┢        | ╁                                                | -            | ł   | -          | 76        |                                                  |          | 一        |
|             | 27       | -          | $\vdash$           | $\vdash$ | ┝          | $\vdash$ | ╁┈       | -        | $\vdash$                                         | ┢            | ł   | <b></b>    | 77        | _                                                | _        | H        |
|             | 28       | =          | -                  | ╁        | ┢          | $\vdash$ | $\vdash$ | <u> </u> | <del>                                     </del> | <del> </del> | 1   |            | 78        |                                                  |          | t        |
| $\vdash$    | 29       | =          |                    | $\vdash$ |            | $\vdash$ |          |          | <del> </del>                                     |              |     |            | 79        |                                                  |          | T        |
|             | 30       | =          |                    | <u> </u> | ┢          |          | H        |          | _                                                |              |     |            | 80        |                                                  | _        | T        |
|             | 31       | =          | H                  | ┢╴       |            | t        | t        |          |                                                  |              | 1   |            | 81        |                                                  |          | T        |
|             | 32       | =          | İΤ                 | t        |            | Г        | Г        | T        |                                                  |              | 1   |            | 82        |                                                  |          | Γ        |
|             | 33       | =          |                    |          |            |          |          |          |                                                  |              | 1   |            | 83        |                                                  |          | Г        |
|             | 34       | =          | Г                  |          |            |          |          |          |                                                  |              | 1   |            | 84        |                                                  |          | Π        |
|             | 35       | =          |                    |          |            |          |          |          |                                                  |              |     |            | 85        |                                                  |          |          |
|             | 36       | =          |                    |          |            |          |          |          |                                                  |              | ]   |            | 86        |                                                  |          | L        |
|             | 37       | =          |                    |          |            |          |          | L        |                                                  |              | ] . |            | 87        |                                                  |          | L        |
|             | 38       |            |                    |          |            |          |          |          |                                                  | Ĺ            |     |            | 88        | _                                                |          | L        |
|             | 39       |            |                    |          |            |          |          |          |                                                  | L            | ]   |            | 89        |                                                  | L        | L        |
|             | 40       | L          | L                  | <u> </u> | L          | ┖        | ↓        | <u> </u> | <u> </u>                                         |              |     |            | 90        | <u> </u>                                         | <u> </u> | L        |
|             | 41       | L          | L                  | <u> </u> | <u>L</u>   |          | ļ        |          | _                                                | _            |     |            | 91        |                                                  |          | L        |
| <u></u>     | 42       | L_         | ╙                  | <u> </u> | <u>L</u> . | <u> </u> | _        | ↓_       | ┞                                                | L-           | 1   | L          | 92        | L                                                |          | $\perp$  |
| <u></u>     | 43       | <u> </u>   | <u> </u>           | ـــ      | ــــ       | ┞        | <u> </u> | Щ        | <u> </u>                                         | _            | 1   | <u> </u>   | 93        | _                                                | _        | 1        |
|             | 44       | <b>Ļ</b> _ | <u> </u>           | ــــ     | lacksquare | <b>!</b> | <u> </u> | ↓_       | ┞                                                |              | 1   |            | 94        | $\vdash$                                         | L-       | $\perp$  |
| <u></u>     | 45       | ┞          | $oldsymbol{\perp}$ | ↓_       | <u> </u>   | 1        | ļ.,      | Ь.       |                                                  | _            | -   | <u> </u>   | 95        | -                                                | <u> </u> | $\vdash$ |
|             | 46       | <b>├</b> - | <u> </u>           | ــ       | -          | 1        | $\vdash$ | ⊢        | -                                                | -            | -   | <u> </u>   | 96        | -                                                |          | $\vdash$ |
| <u> </u>    | 47       | <b>├</b> - |                    | ۲-       | $\vdash$   | 1-       | +-       |          | $\vdash$                                         | -            | ł   | <u> </u>   | 97        | -                                                | H        | +        |
| -           | 48       | $\vdash$   | -                  | -        | ⊢-         | 1-       | ├-       | ├        | ⊢                                                | ⊢            | -   | ļ <u> </u> | 98        | <del>                                     </del> | -        | ╀        |
|             | 49       | -          | -                  | +-       | ⊢          | ₩        | ₩        | -        | -                                                | $\vdash$     | ┨   | <u> </u>   | 99<br>100 | $\vdash$                                         | -        | ╁        |
|             | 50       |            |                    | Ц.       | Ц.         | <u> </u> | <u> </u> | <u> </u> | <u> </u>                                         | L_           | j   | Щ_         | 1100      | Щ                                                |          | _        |

| İ   |                                                  |                |          |          |                                                  |          |              |                                                  |          |          |                                                  | ĺ  |
|-----|--------------------------------------------------|----------------|----------|----------|--------------------------------------------------|----------|--------------|--------------------------------------------------|----------|----------|--------------------------------------------------|----|
| -   | _                                                | ᅙ              |          |          |                                                  |          |              |                                                  |          |          |                                                  | ı  |
| 1   | Final                                            | 흥              |          |          |                                                  |          |              |                                                  |          |          |                                                  | ı. |
| ŀ   | 正                                                | Original       |          |          |                                                  |          |              |                                                  |          |          |                                                  | ĺ  |
|     |                                                  |                |          |          |                                                  |          |              |                                                  |          |          | L.                                               |    |
| ١   |                                                  | 51             |          |          |                                                  |          |              |                                                  |          |          | _                                                | ı  |
|     |                                                  | 52             |          |          |                                                  |          |              |                                                  |          |          |                                                  | ı  |
| - [ |                                                  | 52<br>53       |          |          |                                                  |          |              |                                                  |          |          |                                                  | ı  |
| . [ |                                                  | 54             |          |          |                                                  |          |              |                                                  |          |          |                                                  | ı  |
| 1   |                                                  | 55             |          |          |                                                  |          |              |                                                  |          |          |                                                  | l  |
| ı   |                                                  | 56             |          |          |                                                  |          |              |                                                  |          |          |                                                  | ľ  |
|     |                                                  | 57             |          |          |                                                  |          |              |                                                  |          |          |                                                  | ı  |
| .   |                                                  | 58             |          |          | _                                                | $\vdash$ | Г            |                                                  |          |          |                                                  | ı  |
| - 1 |                                                  | 58<br>59       | _        |          |                                                  | -        | $\vdash$     | _                                                |          | -        |                                                  | ı  |
| -4  |                                                  | 60             |          |          | _                                                | -        | $\vdash$     |                                                  |          |          |                                                  | ı  |
| **  |                                                  | 61             | _        | ├        | _                                                | ┢        | <del> </del> | _                                                | -        |          | -                                                | I  |
|     |                                                  | 62             |          | $\vdash$ |                                                  | ┝        | $\vdash$     | Н                                                |          |          | _                                                | l  |
|     |                                                  | 02             |          | -        |                                                  | <u> </u> |              |                                                  |          | _        |                                                  | l  |
|     |                                                  | 63             |          |          | _                                                | _        | ┡            |                                                  |          | <u> </u> |                                                  | l  |
|     |                                                  | 64_            |          | _        | <u> </u>                                         | <u> </u> | <u> </u>     | $\vdash$                                         | L        | <u> </u> | $\vdash$                                         | l  |
|     |                                                  | 65             |          |          | <u> </u>                                         |          | _            | $\vdash$                                         | <u> </u> |          | $\vdash$                                         | ١  |
|     |                                                  | 66<br>67       |          | <u> </u> | <u> </u>                                         | L_       | ļ            | ldash                                            | _        | <u> </u> | <u> </u>                                         | ١  |
|     |                                                  | 67             |          |          |                                                  | L        |              |                                                  |          |          | _                                                | l  |
| ij  |                                                  | 68             |          |          | L.                                               |          |              |                                                  | _        |          |                                                  | ١  |
| - 1 |                                                  | 69             |          |          |                                                  | L        |              |                                                  | L.       | <u> </u> |                                                  | l  |
|     |                                                  | 69<br>70       |          |          |                                                  | <u> </u> |              |                                                  |          |          |                                                  | l  |
| . 1 |                                                  | 71             |          |          |                                                  |          |              |                                                  |          |          |                                                  |    |
|     |                                                  | 72             |          |          |                                                  |          |              |                                                  |          |          |                                                  | l  |
|     |                                                  | 73             |          |          |                                                  |          |              |                                                  |          |          |                                                  | l  |
|     |                                                  | 72<br>73<br>74 |          |          | Π.                                               |          |              |                                                  |          |          |                                                  | l  |
| . 1 |                                                  | 75<br>76       |          |          |                                                  |          |              |                                                  |          |          |                                                  |    |
|     |                                                  | 76             |          |          |                                                  |          | Ĭ            |                                                  |          |          |                                                  |    |
|     |                                                  | 77<br>78       |          |          |                                                  |          |              |                                                  |          |          |                                                  | l  |
| ĺ   |                                                  | 78             |          |          |                                                  |          |              |                                                  |          |          |                                                  | 1  |
|     |                                                  | 79             |          |          |                                                  |          | Π            |                                                  |          |          |                                                  | 1  |
|     |                                                  | 80             |          |          | П                                                | Г        | Π            |                                                  |          |          | Г                                                | 1  |
|     |                                                  | 81             |          |          |                                                  |          |              |                                                  |          |          | Г                                                | 1  |
|     |                                                  | 82             |          |          | Τ                                                | 1        |              |                                                  |          |          |                                                  | 1  |
|     |                                                  | 83             |          |          |                                                  |          |              |                                                  |          |          |                                                  | 1  |
|     |                                                  | 83<br>84       |          | Г        |                                                  |          |              |                                                  | Г        | Г        | Г                                                | 1  |
|     |                                                  | 85             |          |          | Т                                                | Τ        |              | T                                                |          | Г        | Г                                                | ١  |
|     | $\vdash$                                         | 86             |          | T        | T                                                |          | 1            |                                                  | <u> </u> |          | Г                                                | 1  |
|     | _                                                | 87             | $\vdash$ | <u> </u> | <del>                                     </del> | Т        | T            | Т                                                | T        |          | Т                                                | 1  |
|     |                                                  | 88             | Ι-       | $\vdash$ | Т                                                | T        | T            | T                                                | t        |          |                                                  | 1  |
|     |                                                  | 89             | Ι-       | $\vdash$ | Т                                                |          | $\vdash$     | <del>                                     </del> | Г        |          | 1                                                | 1  |
|     | Ь—                                               | 90             |          | H        | <b>—</b>                                         | ┢        | $t^-$        | $\vdash$                                         | 1        | Т        | $\vdash$                                         | 1  |
|     | <del>                                     </del> | 91             |          | $t^{-}$  | $\vdash$                                         | 一        | $\vdash$     | ┢                                                | $\vdash$ |          | <del>                                     </del> | 1  |
|     |                                                  | 92             | -        | ┢        | $\vdash$                                         | t        | 1            | <del>                                     </del> | $\vdash$ | $\vdash$ | $\vdash$                                         | 1  |
|     | ├──                                              | 93             | <u> </u> | $\vdash$ | $\vdash$                                         | -        | $\vdash$     | $\vdash$                                         | $\vdash$ | ╁╌       | $\vdash$                                         | 1  |
|     | <del> </del>                                     | 94             |          | ╁╌       | $\vdash$                                         | +-       | ╁╌           | ┢                                                | ├        | ┝        | <del>                                     </del> | 1  |
|     | <del> </del>                                     | 95             | $\vdash$ | ├-       | $\vdash$                                         | -        | $\vdash$     | $\vdash$                                         | -        | ├-       | $\vdash$                                         | 1  |
|     | <del> </del>                                     | 96             | -        | ├-       | $\vdash$                                         | +-       | ├-           | $\vdash$                                         |          | ╁        | $\vdash$                                         | 1  |
|     | <u> </u>                                         | 97             | -        |          | $\vdash$                                         | +-       | ╁╾           | +-                                               | $\vdash$ | ├        | $\vdash$                                         | 1  |
|     | <u> </u>                                         | 98             | <u> </u> | $\vdash$ | ⊢                                                | -        | ┢            | ┢                                                | $\vdash$ | ├        | ├-                                               | 1  |
|     | <b></b>                                          | 90             | -        | ┼        | +-                                               | $\vdash$ | $\vdash$     | $\vdash$                                         | $\vdash$ | $\vdash$ | ₩                                                | ł  |
|     |                                                  | 99             | $\vdash$ | ⊢        | ├-                                               | ├-       | ├-           |                                                  | ├-       | ├        | ⊢                                                |    |
|     | l                                                | 100            | ı        | 1        | ı                                                | 1        | Į .          | 1                                                | ı        | 1        | Ι.                                               | J  |

| Cla      |                                                                                  |                |            |                                        | ate            | <del></del>  |                |            | $\neg$       |          |
|----------|----------------------------------------------------------------------------------|----------------|------------|----------------------------------------|----------------|--------------|----------------|------------|--------------|----------|
|          |                                                                                  |                |            |                                        |                |              |                |            |              |          |
| a        | ina                                                                              |                |            |                                        |                |              |                |            |              |          |
| Final    | Original                                                                         |                |            |                                        |                |              |                |            |              |          |
|          | 0                                                                                |                |            |                                        |                |              |                |            |              |          |
|          | 101                                                                              |                | _          |                                        |                | _            |                |            |              | $\neg$   |
|          | 102                                                                              |                |            |                                        |                |              |                |            |              | ヿ        |
|          | 103<br>104<br>105                                                                |                |            |                                        |                |              |                |            |              | ヿ        |
|          | 104                                                                              |                |            |                                        |                |              |                |            |              |          |
|          | 105                                                                              |                |            |                                        |                |              |                |            |              |          |
|          | 106                                                                              |                |            |                                        |                |              |                |            |              |          |
|          | 107                                                                              |                |            |                                        |                |              |                |            |              |          |
|          | 108                                                                              |                |            |                                        |                |              |                |            |              |          |
|          | 106<br>107<br>108<br>109                                                         |                |            |                                        |                |              |                |            |              |          |
|          | 110                                                                              | -              |            |                                        |                |              |                |            |              |          |
|          | 111                                                                              |                |            |                                        |                |              |                |            |              |          |
|          | 112                                                                              |                |            |                                        |                |              |                |            |              |          |
|          | 113                                                                              |                |            |                                        |                |              |                |            |              |          |
|          | 114                                                                              |                |            |                                        |                |              |                |            |              |          |
|          | 115                                                                              |                |            |                                        |                |              |                |            |              |          |
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|          | 117                                                                              |                |            |                                        |                |              |                |            |              |          |
|          | 117<br>118<br>119<br>120<br>121                                                  |                |            |                                        |                |              |                |            |              |          |
|          | 119                                                                              |                | Ŀ          |                                        |                |              |                |            |              |          |
|          | 120                                                                              |                |            |                                        |                |              |                |            |              |          |
|          | 121                                                                              |                |            |                                        |                |              |                |            |              |          |
|          | 122                                                                              |                |            |                                        |                |              |                |            |              |          |
|          | 123                                                                              |                |            |                                        |                |              |                |            |              |          |
|          | 124                                                                              |                |            |                                        |                |              |                |            |              |          |
|          | 125                                                                              |                |            |                                        |                |              |                |            |              |          |
|          | 126                                                                              |                |            |                                        |                |              |                |            |              |          |
|          | 127                                                                              |                |            |                                        |                |              |                |            |              |          |
|          | 128                                                                              |                | Ĺ          |                                        |                | <u> </u>     |                |            |              | Ш        |
|          | 129                                                                              |                |            |                                        |                |              |                |            |              | Ш        |
|          | 130                                                                              |                |            |                                        | <u> </u>       |              | L              |            |              |          |
|          | 131                                                                              | _              |            |                                        | L              | L            |                |            | L            |          |
| l        | 132                                                                              |                |            |                                        | L              |              |                |            | L            |          |
|          | 122<br>123<br>124<br>125<br>126<br>127<br>128<br>129<br>130<br>131<br>132<br>133 |                | <u> </u>   | <u></u>                                | <u></u>        |              | $oxed{oxed}$   | L.         | 乚            |          |
|          | 134                                                                              | _              |            | $oxed{oxed}$                           | <u> </u>       | L_           | _              | _          | <u> </u>     | Ш        |
| <u> </u> | 125                                                                              | <u> </u>       | _          | _                                      | <u> </u>       | _            | <u> </u>       | _          | <u> </u>     | $\sqcup$ |
| L        | 136<br>137<br>138                                                                | <u> </u>       | <u> </u>   | Щ                                      | <u> </u>       | <u> </u>     | <u> </u>       | _          | <u> </u>     | Ш        |
| <u> </u> | 137                                                                              | <u> </u>       | <u> </u>   | <b> </b>                               | <u> </u>       | <u> </u>     | <u> </u>       | <u> </u>   | <u> </u>     | $\vdash$ |
|          | 138                                                                              | <u> </u>       | <u> </u>   | <u> </u>                               | _              | <u> </u>     | <del>  _</del> | <u> </u>   | <u> </u>     |          |
| ļ        | 139<br>140                                                                       | <u> </u>       | <u> </u>   | ــــــــــــــــــــــــــــــــــــــ | <u> </u>       | <b> </b>     | _              |            | <u> </u>     | $\vdash$ |
| <b> </b> |                                                                                  | <del> </del> — | <u> </u>   | ļ                                      | <u> </u>       | _            | <del>  -</del> | <u> </u>   | <u> </u>     | $\sqcup$ |
| <u> </u> | 141                                                                              | ▙              | Ŀ          | <u> </u>                               | ⊢-             | <u> </u>     | <del>  -</del> | <u> </u>   | <u> </u>     | $\vdash$ |
| <u> </u> | 142                                                                              | ├              | -          | ⊢                                      | <u> </u>       | $\vdash$     | ├-             | $\vdash$   | <u> </u>     | <u> </u> |
| <u> </u> | 143                                                                              |                | <b>⊢</b> – | ⊢                                      | l —            | <b> </b>     | <b>⊢</b>       | ⊢          | _            | -        |
|          | 144                                                                              | <b>├</b>       | <u> </u>   | $\vdash$                               | _              | <del> </del> | -              | <b>├</b> ─ | <b> </b>     | $\vdash$ |
|          | 145                                                                              | ـــــ          | ├-         | ├                                      | <u> </u>       |              | <del> </del>   | ├-         | -            |          |
| <u> </u> | 146                                                                              | <b>Ļ</b> _     | -          | ├-                                     | <del> </del> — | ├-           | ├              |            |              |          |
| <u> </u> | 147                                                                              | ↓              | <u> </u>   |                                        | <del> </del>   | ├            | ├              | ⊢          | <u> </u>     | $\vdash$ |
|          | 148                                                                              | <del> </del>   |            |                                        | <b> </b>       | <b>⊢</b> -   | <del> </del> — | 1          | <del> </del> | <u> </u> |
| <u> </u> | 149                                                                              | ┞              | <u> </u>   | <b> </b> -                             | <u> </u>       | <del> </del> | <del>  -</del> | $\vdash$   | ⊢            |          |
| L        | 150                                                                              | L              | <u>L</u>   | <u></u>                                | <u>L</u>       | L            | <u> </u>       | <u></u>    | L_           |          |